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10/519,063	12/22/2004	Cornelis Antonie Maria	CA0669	7330

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EXAMINER	
NGUYEN, LUONG TRUNG	
ART UNIT	PAPER NUMBER
2622	

NOTIFICATION DATE	DELIVERY MODE
11/09/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/519,063	MARIA, CORNELIS ANTONIE	
	Examiner	Art Unit	
	LUONG T. NGUYEN	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 5-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3 and 5-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 08/23/2010 have been fully considered but they are not persuasive.

In re pages 10-11, Applicant argues that none of the claims of the '515 patent disclose, teach or suggest "applying the contour-reconstruction-filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one output pixel" or "applying the contour-reconstruction-filter in parallel with application of the color-reconstruction-filter to the pixels" as is recited in Applicant's amended independent claim 1.

In response, it should be noted that Application claim 1 and Patent claim 1 are both drawn to the same invention, i.e., a method for signal processing. These claims differ in scope in that Application claim 1 with additional limitations, i.e., "applying the contour-reconstruction-filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one output pixel" and "applying the contour-reconstruction-filter in parallel with application of the color-reconstruction-filter to the pixels", is narrower in scope than Patent claim 1. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Patent claim 1 to be narrower by adding the additional limitations, "applying the contour-reconstruction-filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one

output pixel" and "applying the contour-reconstruction-filter in parallel with application of the color-reconstruction-filter to the pixels" so to obtain Application claim 1, as claimed.

Allowance of Application claim 1 would result in an unjustified time-wise extension of the monopoly granted for the invention defined by Patent claim 1. Therefore, the rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting is appropriate.

Since the Applicant has not filed a Terminal Disclaimer, the rejection on the ground of nonstatutory obviousness-type double patenting is maintained.

Claim Objections

2. Claims 11 is objected to because of the following informalities:

Claim 11 (lines 2-3), "a luminance-reconstruction filter" should be changed to --the luminance-reconstruction-filter--.

Claim 11 (lines 4-5), "applying a respective luminance-reconstruction-filter is applied to an increased array-size" should be changed to --applying a respective luminance-reconstruction-filter to an increased array-size--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 amended with limitation "wherein the computing system includes a computing system of a camera." It causes a confusion since it is not known that the limitation "a computing system," as recited in claim 16 (line 2) is the same or different from limitation "a computing system," as recited in claim 16 (line 3).

It also causes a confusion since it is not known the antecedent basis of the limitation "the computing system," as recited in claim 16 (lines 10 and 22) is whether limitation "a computing system," as recited in claim 16 (line 2) or limitation "a computing system," as recited in claim 16 (line 2).

Claim 17 amended with limitation "wherein the computing system includes a computing system of a camera." It causes a confusion since it is not known that the limitation "a computing system," as recited in claim 16 (line 1) is the same or different from limitation "a computing system," as recited in claim 16 (line 2).

It also causes a confusion since it is not known the antecedent basis of the limitation "the computing system," as recited in claim 17 (lines 5, 6-7, 13, 25) is whether limitation "a computing system," as recited in claim 17 (line 1) or limitation "a computing system," as recited in claim 17 (line 2).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 3, 5-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 8, 10-15 of U.S. Patent No. 7,573,515. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons below.

Regarding Application claim 1, Patent claim 1 contains all the limitation of the claim 1 of the instant application, except Patent claim 1 omits limitation "applying the contour-reconstruction-filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one output pixel" and "applying the contour-reconstruction-filter in parallel with application of the color-reconstruction-filter to the pixels". However, since Application claim 1 and Patent claim 1 are both drawn to the same invention, i.e., a method for signal processing. These claims differ

in scope in that application claim 1 with additional limitations, i.e., "applying the contour-reconstruction-filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one output pixel" and "applying the contour-reconstruction-filter in parallel with application of the color-reconstruction-filter to the pixels", is narrower in scope than Patent claim 1. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Patent claim 1 to be narrower by adding the additional limitations, "applying the contour-reconstruction-filter by multiplying pixels of the array by contour reconstruction filter coefficients after weighting by the green parameter and summing the multiplied pixels into one output pixel" and "applying the contour-reconstruction-filter in parallel with application of the color-reconstruction-filter to the pixels" so to obtain Application claim 1, as claimed.

Allowance of application claim 1 would result in an unjustified time-wise extension of the monopoly granted for the invention defined by Patent claim 1. Therefore, the rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting is appropriate.

Regarding Application claim 3, Patent claim 3 disclosed all the limitations of Application claim 3.

Regarding Application claim 5, Patent claim 8 disclosed all the limitations of Application claim 5.

Regarding Application claim 6, Patent claim 13 disclosed all the limitations of Application claim 6.

Regarding Application claim 7, Patent claim 11 disclosed all the limitations of Application claim 7.

Regarding Application claim 8, Patent claim 1 contains all the limitation of the claim 1 of the instant application, except Patent claim 1 omits limitation "applying the contour-reconstruction-filter, in parallel with the luminance-reconstruction filter and by adding their reconstructed signals thereafter," as claimed in application claim 8. However, since application claims 1, 8 and patent claim 1 is the same in scope, it would have been obvious to one of ordinary skill in the art to modify Patent's claim 1 with the additional limitations so to obtain application claim 8 as claimed.

Regarding Application claim 9, Patent claim 1 contains all the limitation of the claim 1 of the instant application, except Patent claim 1 omits limitation "applying the contour-reconstruction-filter to an array-size, which exceeds the size of an array to which the color-reconstruction-filter is applied," as claimed in application claim 9. However, since application claims 1, 9 and patent claim 1 is the same in scope, it would have been obvious to one of ordinary skill in the art to modify Patent's claim 1 with the additional limitations so to obtain application claim 9 as claimed.

Regarding Application claim 10, Patent claim 13 disclosed all the limitations of Application claim 10.

Regarding Application claim 11, Patent claim 12 disclosed all the limitations of Application claim 11.

Regarding Application claim 12, Patent claim 13 disclosed all the limitations of Application claim 12.

Regarding Application claim 13, Patent claim 13 disclosed all the limitations of Application claim 13.

Regarding Application claim 14, Patent claim 1 contains all the limitation of the claim 1 of the instant application, except Patent claim 1 omits limitation "applying a 3.times.3-color-reconstruction-filter in combination with a 5.times.5 contour-reconstruction0filter, in particular by adding subsequently a color-reconstructed and a contour-reconstructed signal for further processing," as claimed in application claim 14. However, since application claims 1, 8 and patent claim 1 is the same in scope, it would have been obvious to one of ordinary skill in the art to modify Patent's claim 1 with the additional limitations so to obtain application claim 14 as claimed.

Regarding Application claim 15, Patent claim 14 contains all the limitation of the claim 15 of the instant application, except Patent claim 14 omits limitation "apply the contour-reconstruction-filter by multiplying pixels of the array by contour-reconstruction-filter coefficients after weighting by the green parameter" and "parallel process the contour-reconstruction-filter and a color-reconstruction-filter". However, since Application claim 15 and Patent claim 14 are both drawn to the same invention, i.e., an apparatus for signal processing. These claims differ in scope in that application claim 15 with additional limitations, i.e., "apply the contour-reconstruction-filter by multiplying pixels of the array by contour-reconstruction-filter coefficients after weighting by the green parameter" and "parallel process the contour-reconstruction-filter and a color-reconstruction-filter", is narrower in scope than Patent claim 14. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Patent claim 14 to be narrower by adding the additional limitations, "apply the contour-reconstruction-filter by multiplying pixels of the array by contour-reconstruction-filter coefficients after weighting by the green parameter" and "parallel process the contour-reconstruction-filter and a color-reconstruction-filter" so to obtain Application claim 15, as claimed.

Allowance of application claim 15 would result in an unjustified time-wise extension of the monopoly granted for the invention defined by Patent claim 14. Therefore, the rejection of claim 15 on the ground of nonstatutory obviousness-type double patenting is appropriate.

Regarding Application claim 16, Patent claim 15 contains all the limitation of the claim 16 of the instant application, except Patent claim 15 omits limitation "apply the contour-

reconstruction-filter by multiplying pixels of the array by contour-reconstruction-filter coefficients after weighting by the green-parameter" and "apply the contour-reconstruction-filter in parallel with application of a color-reconstruction-filter to the pixels". However, since Application claim 16 and Patent claim 15 are both drawn to the same invention, i.e., a computer program product storable on a non-transitory medium readable by a computing system. These claims differ in scope in that application claim 16 with additional limitations, i.e., "apply the contour-reconstruction-filter by multiplying pixels of the array by contour-reconstruction-filter coefficients after weighting by the green-parameter" and "apply the contour-reconstruction-filter in parallel with application of a color-reconstruction-filter to the pixels", is narrower in scope than Patent claim 15. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Patent claim 15 to be narrower by adding the additional limitations, "apply the contour-reconstruction-filter by multiplying pixels of the array by contour-reconstruction-filter coefficients after weighting by the green parameter" and "parallel process the contour-reconstruction-filter and a color-reconstruction-filter" so to obtain Application claim 16, as claimed.

Allowance of application claim 16 would result in an unjustified time-wise extension of the monopoly granted for the invention defined by Patent claim 15. Therefore, the rejection of claim 16 on the ground of nonstatutory obviousness-type double patenting is appropriate.

Regarding Application claim 17, see Examiner's comments regarding Application claim 16.

Regarding Application claim 18, see Examiner's comments regarding Application claim 15, except the limitation "a camera system comprising an optical system," which is well known in the art that to use such a camera system to perform signal processing as claimed in Application claim 18.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571)272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LUONG T NGUYEN/
Primary Examiner, Art Unit 2622
11/03/10